

REMARKS

With the cancellation of claims 3 and 10, claims 1, 2, 4-9, and 11-15 are now pending in the above-referenced application and are submitted for the Examiner's reconsideration.

The subject matter of claim 3 has been incorporated into claim 1, and the subject matter of claim 10 has been incorporated into claim 7.

Regarding the prior art rejections, it can be gathered from the Ryan document that the electrode segment of a spark-plug electrode is made of an oxidation-resistant and erosion-resistant material, such as platinum. To improve the ductility, the electrode segment additionally contains nickel and copper. The Examiner explains that the "general conditions" of now-canceled Claim 3 are described by the Ryan document. Allegedly, one skilled in the art could routinely determine the "workable ranges," i.e. the feature "copper having a level of 1 to 40 mass percent," by selecting the composition of the electrode segment in such manner, that the electrode segment simultaneously has a sufficient ductility and a sufficient resistance to oxidation and erosion. Nevertheless, Applicants submit that, by optimizing the composition of the electrode segment with regard to the ductility and the resistance to oxidation and erosion, one skilled in the art does not arrive at the subject matter of the claims, but rather at a composition having a higher level of copper. According to the present invention, the composition specified in the present claims produces particularly low thermomechanical stresses between the electrode segment and the electrode base body. The ductility does change within the claimed range, but the optimum ductility does not lie in the claimed range. Therefore, the Ryan document does not teach the subject matter of amended claims 1, 5, and 6.

The Shibata document discloses that the electrode segment of a spark-plug electrode has a platinum alloy, which contains, in addition to platinum, one or more of the elements from the group Ir, Ni, Rh, W, Pd, Ru, and Os (each at up to 20 to 50 weight percent). Therefore, the disclosure of the Shibata document yields a multitude of combinations of the mentioned elements for the composition of the electrode segment. In contrast, a special alloy having the elements Pt, Rh, and Ir and Pt, Rh, and Ni is claimed in the present claims 7 and 11, respectively. It has been established that, in the case of these compounds, the thermomechanical stresses are minimized in a particularly effective manner. Therefore, the invention according to the claims 7 and 11 represents a selection invention. The Shibata document and the other documents do not provide one skilled in the art with any information that the alloy according to the present claims 7 or 11 has the mentioned, advantageous

property. Therefore, to one skilled in the art, the subject matter of the claims 7 and 11 is neither anticipated nor rendered obvious.

It is therefore respectfully requested that the objections and rejections be withdrawn, and that the present application issue as early as possible.

Respectfully submitted,

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